



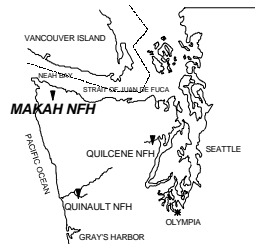
MAKAH NATIONAL FISH HATCHERY

Neah Bay, Washington

INTRODUCTION

The Western Washington Fish and Wildlife Office (WWFWO) and the Olympia Fish Health Center (OFHC) assist the three National Fish Hatcheries (NFH) on the Olympic Peninsula -- Makah, Quilcene, and Quinalt (see locale map below). The WWFWO, OFHC, and NFHs work together to restore salmon for domestic and international fisheries in compliance with Trust responsibilities to tribes, court orders, agreements with states, and international treaties. WWFWO works with cooperators to program and evaluate hatchery production to assure obligations are met with minimal impact on wild fish. OFHC provides fish health diagnostic and treatment services to assure optimum post-release survival of hatchery fish.

This annual report provides basic information on Makah NFH to inform Service employees, visitors, and our cooperators of their hatchery programs



Western Washington locale

Makah NFH, located on the northwest tip of the Olympic Peninsula, began operating in 1981. Its general goals include rebuilding salmon and steelhead runs along the coast of Washington and contributing to current and future fisheries. Specific objectives to meet these goals vary by species and are described on the following pages.

QUICK REFERENCE DATA

LEGEND:	AVG	=	Average (mean)
	BY	=	Brood Year
	FL	=	Fork Length
	COS	=	Coho Salmon
	FCS	=	Fall Chinook Salmon
	WST	=	Winter Steelhead
	♀	=	Female
	♂	=	Male

▶ ADULT AGES AT RETURN

	AGE RANGE	2004 AVG. AGE	1985-2004 AVG. AGE
FCS	2-6 yrs.	3.6	3.7
COS	2-3 yrs.	2.8	2.8
WST	2-6 yrs.	3.1	3.3

▶ ADULT FORK LENGTHS in millimeters (inches)

	FL RANGE	FL MEAN
FCS	203-1185mm (8-47")	813mm (32")
COS	205-903mm (8-36")	650mm (26")
WST	330-1008mm (13-40")	675mm (27")

▶ ADULT ENTRY DATES TO HATCHERY

	1988-2004 RANGE	MEAN ENTRY DATE
FCS	Sep - Nov	October 12
COS	Sep - Dec	October 25
WST	Sep - Feb	December 21

▶ NUMBER AND DATES OF ADULTS SPAWNED

	2004 Date Range	2004 # Spawned			1986-2004 Avg # Spawned
		♂	♀	Total	
FCS	10/02-11/24	589	606	1195	966
COS	09/23-12/21	233	209	442	517
WST	10/19-01/24	172	151	323	444

Please direct questions, comments, and suggestions to:



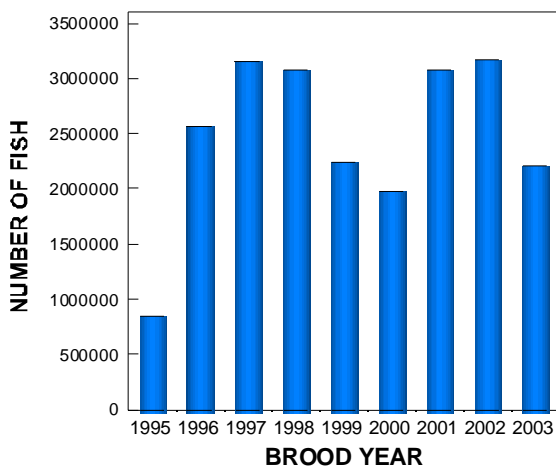
Western Washington Fish and Wildlife Office
510 Desmond Drive SE, Suite 102
Lacey, WA 98503-1273
(360) 753-9440

Makah National Fish Hatchery
P.O. Box 739
Neah Bay, WA 98357
(360) 645-2521

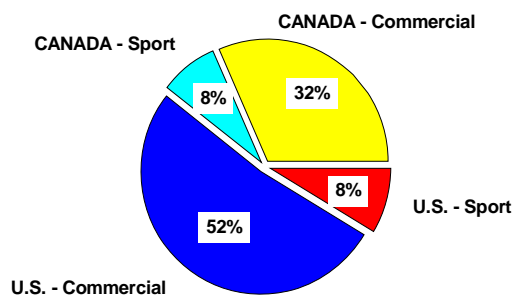


FALL CHINOOK SALMON

FALL CHINOOK RELEASES
(Brood Years 1995 - 2003)



CATCH OF FALL CHINOOK
(Brood Years 1985 – 2000)



OBJECTIVE: Rebuild Sooes River FCS run to approximately 8,000 returning adults. Contribute to local fisheries near Cape Flattery, as well as tribal fisheries in the Sooes and Waatch Rivers.

RELEASES: The current program goal is the release of 2.2 million 3.5-inch fish (subyearlings) at the hatchery. Approximately 850 adults are passed upstream to seed the watershed. When available, 100,000 fish are transferred to the Makah Tribe's Educket Creek facility on the Waatch River for rearing and release.

CATCH: Commercial fisheries account for 84% of all fish captures. Of the FCS produced by Makah NFH, 40% are caught in Canadian waters, 50% in Alaska, 10% in Washington waters. The portion caught in Washington will increase as the run builds and directed fisheries in the Sooes River occur.

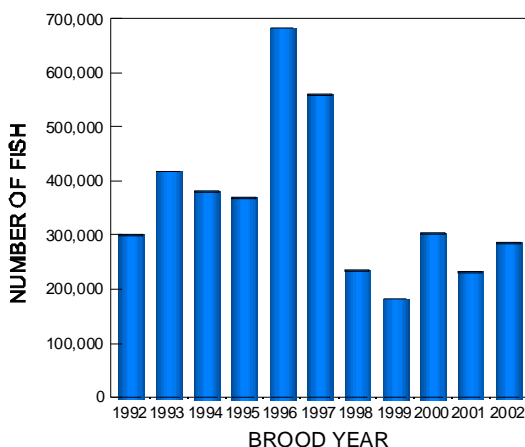
FCS RETURNS TO HATCHERY RACK AND RIVER BY RETURN YEAR

Return Year	Age at Return					Total Per Year
	2	3	4	5	6	
1996	75	1,756	1,638	110	7	3,586
1997	88	231	3,826	171	0	4,316
1998	77	394	926	1,323	0	2,720
1999	168	353	538	357	24	1,440
2000	301	425	553	138	10	1,427
2001	604	1,553	2,496	222	14	4,889
2002	712	1,126	5,522	405	0	7,765
2003	359	1,796	2,679	644	0	5,478
2004	204	5,937	6,361	975	0	13,477

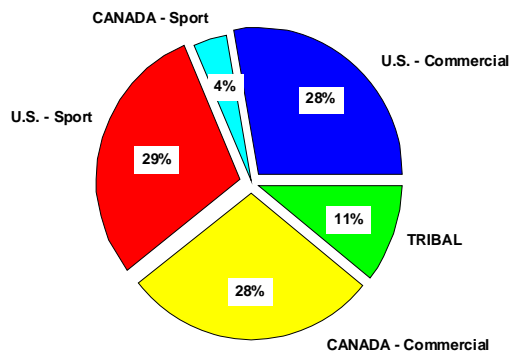
The run is successfully building. Beginning in 1997, tribal fisheries have been conducted in the Sooes River.
100 percent Chinook mass-marking was initiated this year.

COHO SALMON

COHO RELEASES (Brood Years 1992 - 2002)



CATCH OF COHO (Brood Years 1988 - 2001)



OBJECTIVE: Build coho runs in Cape Flattery area. Contribute to local fisheries near Cape Flattery, as well as tribal fisheries in the Sooes and Waatch Rivers.

RELEASES: Approximately 235,000 coho yearlings are released annually into the Sooes River. An additional 50,000 pre-smolts are provided to the Makah Tribe's facility on Educket Creek. Sufficient adults are passed upstream to seed the watershed.

CATCH: An average of 6,000 fish (from hatchery programs) are caught in U.S. and Canadian waters each year.

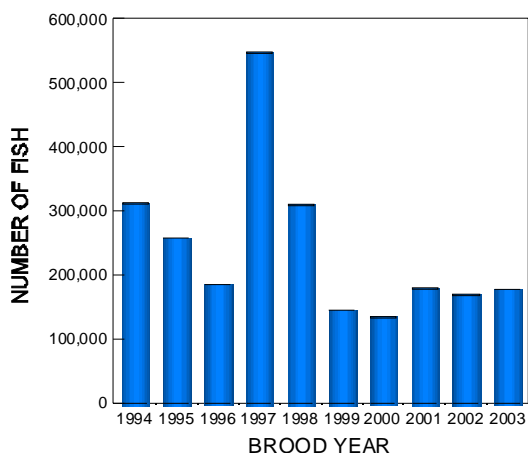
COHO RETURNS TO HATCHERY RACK BY RETURN YEAR

Return Year	Age at Return		Total per Year
	2	3	
1995	493	7,530	8,023
1996	200	5,395	5,595
1997	492	2,193	2,685
1998	446	2,969	3,415
1999	492	7,842	8,334
2000	504	4,401	4,905
2001	438	6,388	6,826
2002	485	5,972	6,457
2002	372	3,781	4,153
2004	768	3,613	4,381

The current coho program contributes to various fisheries and is very successful. Average survival is 4 percent. A coho mass-marking program was initiated in the fall/winter of 1997-98 to support selective fisheries.

WINTER STEELHEAD

WINTER STEELHEAD RELEASES (Brood Years 1994 - 2003)



CATCH OF WINTER STEELHEAD (1995 – 2005)

Catch Year	Number Caught	
	Sooes River	Waatch River
1994-95	1,826	163
1995-96	1,857	143
1996-97	2,133	20
1997-98	1,539	166
1998-99	2,967	50
1999-00	963	31
2000-01	1,406	74
2001-02	2,220	90
2002-03	446	22
2003-04	1,895	2
2004-05	3,516	6

OBJECTIVE: Increase commercial and sport fishing opportunities and harvest in the Sooes and Waatch Rivers.

RELEASES: The current production goal is the release of 175,000 yearlings into the Sooes River and transfer of 25,000 yearlings to the Waatch River.

CATCH: Winter steelhead are caught in commercial and sport fisheries in the Sooes and Waatch Rivers. Few are caught in the ocean.

WST RETURNS TO HATCHERY RACK AND RIVER BY RETURN YEAR

Return Year	Age at Return					Total Per Year
	2	3	4	5	6	
1995-96	21	776	48	0	0	845
1996-97	0	345	131	5	0	481
1997-98	2	248	194	1	0	445
1998-99	5	2,261	726	5	0	2,997
1999-00	6	510	118	5	0	639
2000-01	0	299	289	2	0	590
2001-02	19	1,213	516	34	0	1,782
2002-03	6	441	73	0	0	520
2003-04	163	169	249	0	0	581
2004-05	1	818	94	0	0	913

Steelhead are managed as two populations - a hatchery population, entering from October to February, and a wild population, entering from March to May. The wild population is allowed to move upstream past the hatchery to spawn naturally.